U.S. AIR FORCE

AF Serial Number Tracking IPT

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- **AF IPT Mission**

- **DOD Background**

- **USAF Background**

- **SNT Analysis**

- **AF CONOPs**

- **SNT Implementation**

- **Significant Issues**

AF IPT Mission

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- **Design and implement a Serial Number Tracking and management capability for the U.S. Air Force**

- **Coordinate with other organizations and services for DOD Serial Number Tracking program implementation**

Integrity - Service - Excellence

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- ## Acquisition/Engineering
  - **Part Mark, Birth Certificate, Warranty Management, OSS&E, Configuration Management, Safety of Flight/High Dollar/Time Critical Item Management**

- ## Supply
  - **Inventory Accuracy, Material Management, Item Visibility by SN, Fraudulent Part Identification**

- ## Transportation
  - **In-Transit Visibility, Track Transportation Method/Damages**

- ## Maintenance
  - **Item Visibility, Cost Control, Repair History, Bad Actor Identification (MTBF), Quality Deficiency Report Tracking, Improved Bills of Material, Engine Stub Time Management**

- ## Disposal and Reutilization
  - **Hazardous Materials/Precious Metals Tracking, Demilitarization, Prevent Inappropriate Re-entry of Parts – Surplus/Excess**

DoD Background

- **Requirements**
  - **ODUSD(L&MR) memo: <u>Serialized Item Management</u> (SIM) of Equipment Maintenance - 4 Sep 02**
  - **ODUSD memo: DoD Policy and Implementation for <u>Unique Item Identification</u> (UID) - 19 Dec 02**

- **<u>DoD Goal</u>**
  - **Implement policies for uniquely identifying items**

- **<u>Benefits</u>**
  - **Integration of item data across all agencies, FMEA**
  - **Improved item visibility, management and accountability (CFO Compliance)**

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- **Requirement**
  - **AF CONOPs for <u>Serial Number Tracking (SNT) and Product Marking</u> signed - 27 Feb 03**
- **USAF AIT PMO**
  - **Provide standards and technological options/data collection solutions for marking**
- **USAF SNT Team**
  - **Support DoD, implement CONOPS, business rules, policy and integrate throughout logistics supply chain and management information systems**
  - **AF/ILI Responsibility -- Feb 03**
  - **AF IPT Co-Chaired by AF/ILI and AFMC/LGI**

- **Determined Three Major Considerations for SNT:**
  - <u>**Tracking**</u>
    - **Where is the asset?**
    - **Processes/Business Rules/Requirements**
  - <u>**Capabilities**</u>
    - **What can I do with serial tracking data?**
    - **Processes/Business Rules/Requirements**
  - <u>**Systems Changes**</u>
    - **What changes are necessary to support tracking and capabilities?**
    - **Processes/Business Rules/Requirements**

- **Divided System Life Cycle into major functional areas for analysis:**
  - **Acquisition/Manufacturing/Engineering, Transportation, Supply, Maintenance and Disposition**

- **High-level document that provides framework and identifies requirements to track selected assets individually throughout information systems, from cradle to grave**
  - **Items subject to SNT**
  - **Identification and Marking Standards**
  - **Modification of Information Systems**
  - **System Architecture**
  - **Modification of Business Processes**

Tracking Vs. Application of SNT

"Tracking" part of Serial Number Tracking					
"Application" enabled by Serial Number Tracking					
Automated Information Systems					
Manufacture/ Acquisition	**Inbound Transportation**	**Supply**	**Outbound Transportation**	**Maintenance**	**Disposition**

Part mark is common thread

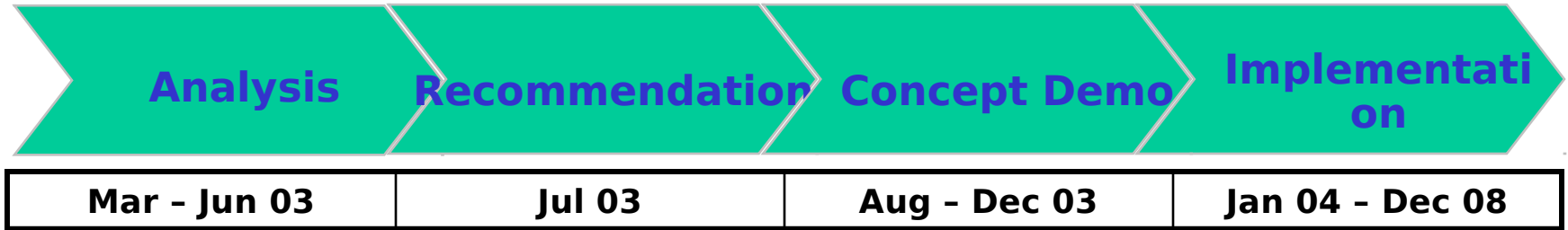|	Manufacture/Acquisition	Inbound Transportation	Supply	Outbound Transportation	Maintenance	Disposition
Track	• Production Traceability	• In-Box ITV	• In-Storage visibility	• In-Box ITV	• On/Off Equipment visibility	• Provide item history to buyer
Applications	• Birth Record • Warranty • ID Defects • Configuration Mgmt	• Locate Asset • Match transportation method to item	• Maintenance pull by S/N • Locate Asset • Capital Reporting • In-use Equip	• Locate Asset • Match transportation method to item	• Trend analysis • Manage configuration • Warranty • Bad Actors • Locate Asset	• Properly DEMIL
Systems	• SAP • G009	• CMOS • GATES • GTN	• SATS • ILS-S • SCS	• CMOS • GATES • GTN	• G081 • CEMS • CAMS	• DRMO • ITS, PDMSS

SNT Implementation

Analysis	Recommendation	Concept Demo	Implementation
Mar – Jun 03	**Jul 03**	**Aug – Dec 03**	**Jan 04 – Dec 08**

Develop Deliverables
- Design Roadmap
- Review Existing Requirements and Processes
    - AF, DoD, DLA, Other Services
- Determine "As Is"
    - Analyze Current Processes
- Design "To Be"
    - Review existing programs
    - Determine Implementation order

Provide Deliverables
- Policy
- Requirements
- 06 POM Estimates
- Implementation Plan
    - Cost and schedule
    - Communication Plan
    - Change Management

Design/Develop/Run Concept Demonstration
- Data/System Interactions
- Operational Simulations
- Review results
- Revise deliverables accordingly

Drive Spiral Implementation
- Phase 1 – Tracking and some analytical capability
    - Short Term (1 year)
    - Quick wins/"low fruit"
    - Subject to available funding
- Phase 2 – More analytical capability
    - Medium Term (2-3 yrs)
    - Important/Time consuming interfaces
    - Some funding
- Phase 3 – The rest of the analytical capability
    - Long Term (4-5 years)
    - Complex/Enterprise
    - Fully funded

Significant Issues

Policy
Work with OSD in defining SNT policy

Funding

AF Funding for IPT, MAJCOMs POM for SNT program

Marking Standards & Technology
OSD publish approved standards & methodologies

Joint Service/ Other Agency Interfaces
Coordinate activities to achieve integrated solution

MAJCOM Participation & Buy-in
Involve MAJCOMS in IPT & implementation

QUESTIONS?

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- **Second SNT IPT Meeting, AFMC   Jun 03**
- **DoD Group Reports   Jun 03**
- **Third SNT IPT Meeting, DC   Jul 03**
- **DoD UID Marking Requirements: Jul 03**
  - **All new Weapon Systems and Major Mods**
  - **DFARS supporting UID requirements**
- **Deliverables: Jul 03**
  - **Requirements, Policy, Roadmap, Implementation Plan**
    with cost and schedule, 06 POM Requirements
- **Concept Demonstration (CD) Aug - Nov 03**
- **Recommend actions based on CD   Dec 03**
- **Modify Systems for SNT Capabilities   TBD**

Funding

- **Issue:**
  - **AF funding for IPT**
  - **MAJCOMs POM for SNT Programs**
- **Action:**
  - **Obtained $300K from AFMC/LG and AF/ILI.**
  - **Submitted BTIP request for CD, May 03**
  - **Determining 06 POM Requirements**
  - **AFLMA developing benefits/ROI data**

Policy

- **Issue:**
  - **Work with OSD in defining SNT policy**
- **Action:**
  - **Functional Teams developing recommendations**
  - **AF AIT PMO and AF/ILI providing AF input to DoD level IPT groups. (Marking, Legacy Systems)**
  - **SAF/AQX evaluating need for acquisition SNT policy**

Marking Standards and Technology

- **Issue:**
  - **OSD publish approved standards and methodologies**
- **Action:**
  - **AF AIT PMO is member of International, National, and Industry Standards Organizations, providing DoD and AF input to accommodate current and future SNT requirements**
  - **AF SNT and AF AIT PMO maintaining currency in latest technology (Equipment, marking capability)**

Joint Service/Other Agency Interfaces

- **Issue:**
  - **Coordinate activities to achieve integrated solution**
- **Action:**
  - **AF SNT IPT working with Navy on implementing Navy SNT concept to track AF repaired USN depot items at OC-ALC (Navy funded)**
  - **AF SNT IPT working with DLA on business rules and system interfaces for design and future implementation of AF SNT processes**
  - **Increasing coordination with the Army and other Agencies**

Warfighter Participation and Buy-in

- **Issue:**
  - **Involve MAJCOMs in IPT and Implementation**
- **Action:**
  - **AF/IL letter solicited participation from MAJCOMs**
  - **Acquired HQ AF, AFMC, AMC, ACC, AETC, AFSOC, AFSPC, AFLMA, USAFE team members**
  - **Coordinating with AMC and ACC Senior Leaders**
  - **Informing MAJCOMs through Articles (Logistics News/Leading Edge) and Briefings (3rd AF Maintenance AIT Forum, AFM/MAG)**
  - **Sending letters to MAJCOMS to identify locally developed SNT capabilities**

Accomplishments

- **Acquired Team Members from throughout Air Force**
- **Prepared SOW and Selected Contractor -- KLSS**
- **First Face to Face Conference 30 Apr – 1 May**
- **Drafted Roadmap and Requirements**
- **Finalized Charter**
- **Established "Knowledge Now" website**
- **Developed Initial Functional Analysis**
- **Briefed OASD, Mr Berkson and Mr Mason**
- **Briefed Third Annual Maintenance AIT Forum**
- **Selected Concept Demonstration Approach**
- **Submitted funding requirement for BTIP through AF/IL**
- **Prepared Articles for Logistics Now/Leading Edge**
- **Conducting Weekly IPT Telecons**